

Rocky Hill, CT 06067-3910 Telephone: (860) 571-5100 FAX: (860) 571-5465

Product Description Sheet Loctite® LED Flood System

P/N: 1359255, 1167582, 1167589, 1167593, 1333333

PRODUCT DESCRIPTION

The Loctite® LED Flood System consists of a Controller, an LED Cure Array, and connecting cable (each sold separately) that produces a curing area of approximately 100mm x 100mm (4" x 4"). This unique LED flood system is designed for Loctite® UV/Visible cure adhesives. The expected life is over 20,000 hours with proper handling. Unlike traditional arc lamps, 100% of LED light output is within the usable cure spectrum of Loctite® adhesives. Each LED Cure Array consists of 144 individually reflectorized LEDs for creating a uniform curing area and are available in either 375 nm, 405 nm, or Indigo® nm wavelengths. The LED Cure Array wavelength is selected according to the curing requirements of the adhesive.

The curing process begins when the adhesive is placed under the LED Cure Array. The two primary variables that control the curing process are the time of exposure and the irradiance of the light. For a given irradiance, the exposure time required to fully cure the adhesive depends primarily on the properties of the adhesive and the optical properties of the substrate.







PRODUCT FEATURES

- Each LED Cure Array is optimized to emit at its specific wavelength (375 nm, 405 nm, or Indigo[®] nm wavelength).
- Optimal curing distance: 50 mm.
- Curing area: 100 mm by 100 mm at a 50 mm distance.
- Typical Irradiance *:
 - LED Flood Array 375 nm: 300 mW/cm²
 - o LED Flood Array 405 nm: 600 mW/cm²
 - LED Indigo[®] wavelength: 600 mW/cm²
- 100% duty cycle rating.
- Instant On/Off (no warm-up time required like traditional arc lamp systems).
- Each LED Cure Array is stackable on 100 mm center-to-center spacing to create a limitless blanket of light.
- The Controller has a digital On/Off timer with 0-99.9 sec range, indicators for Cure Array LED on, overtemperature condition of Cure Array, and error condition. Also has an End-of-Cycle Signal and Error Relay Signal.
- Energy efficient LEDs produce little wasted energy.





Rocky Hill, CT 06067-3910 Telephone: (860) 571-5100 FAX: (860) 571-5465

Product Description Sheet Loctite® LED Flood System

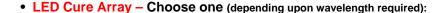
P/N: 1359255, 1167582, 1167589, 1167593, 1333333

PRODUCT FEATURES (continued)

- LEDs produce zero infrared emissions, reducing part heating and warping.
- Fully integrated, self-contained system, including cooling.
- Lasts up to 10 times longer than traditional arc lamps, with negligible output decay during duty life.
- * Typical irradiance was measured at a distance of 50 mm using <u>Radiometer Dosimeter # 1390323</u> as the measurement standard for the LED Flood Array 375 nm and <u>Radiometer Dosimeter #1265282</u> as the measurement standard for the LED Flood Array 405 nm and LED Indigo[®] wavelength models.

Technical Data and Part Numbers

- LED Flood System Controller item # 1359255
 - Width: 12.2 inches (310 mm)
 - Height: 5.3 inches (135 mm)
 - Length: 14.4 inches (365 mm)
 - Weight: 7.7 lbs (3.5 kg)
 - Input Power: 90 260 V.A.C, 47-63 Hz.
 - Power Consumption: Approx. 350 watts
 - Internal Control Voltage: 24 VDC
 - Items supplied with Controller:
 - Footswitch
 - o Operating Manual
 - AC Power Cord



- LED 375 nm Cure Array Item # <u>1167582</u>
- LED 405 nm Cure Array Item # 1167593
- o LED Indigo™ Cure Array Item # 1167589
 - Width: 4 inches (100 mm)
 - Height: 4.5 inches (114 mm)
 - Length: 6 inches (152 mm)
 - Weight: approximately 4 lbs (1.8 Kg.)
 - Compliance: RoHS
- LED Flood System Connecting Cable item # 1333333
 - Length: 7 feet (2134 mm)

Accessories (not included)

- Pair of Cotton Gloves (item # 984070)
- UV V Light Radiometer Dosimeter (item # 1265282)
- UV A/B Light Radiometer Dosimeter (item # 1390323)
- Radiometer Adapter With Light Filter (item 1403403)







